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COVER: Detail of a Turkish Carpet, Northwest Anatolia, late 16th or 17th century, Textile Museum 1976.10.1. Purchase, Arthur D. Jenkins Gift Fund and Proceeds from the Sale of Art. (See Figure 1 in "A Turkish Carpet with Spots and Stripes" by Louise W. Mackie.) Transparency by Raymond L. Schwartz.

The views expressed by the authors are their own; they do not necessarily reflect those of the Textile Museum.

A TURKISH CARPET WITH SPOTS AND STRIPES

LOUISE W. MACKIE

The Bode carpet (Fig. 1 and cover), woven in northwestern Anatolia, is one of the extremely few carpets with this pattern, coloring and size which has survived about three hundred years. The pattern is composed of a pair of wavy lines and a triangular arrangement of three balls in evenly-spaced, staggered rows. Each ball displays an interior "eye." The rhythm of the pattern is altered at both sides where the spacing of the motifs is compressed forming an overlap. This endlessly repeating pattern is framed by a border whose main pattern is dominated by symmetrical cloud bands on a blossoming vine. Floral patterns appear in both guard stripes: rosettes in the inner guard, a vine in the outer guard, half of which is missing.

Unpredictable color changes used in forming the patterns contribute to the carpet's visual strength (see cover). On the all-over ivory ground many colors were used, seemingly at random, which greatly enlivens and enriches its otherwise repetitive nature.

This woollen carpet measures 10'4" by 7'7 3/4" (3.15m. x 2.02m.). It was woven with the symmetrical knot, also known as the Gördes (Ghiordes) or Turkish knot, and has sixty knots per square inch (7.5 horizontal by 8 vertical), a knot count characteristic of Anatolian carpets (see Appendix A for technical data).

A weaving feature known as "lazy lines" or more correctly as diagonal lines was used in some areas of Anatolia and is readily visible in this carpet (see Appendix B for definition and discussion). In the detail in Figure 3, a diagonal line can be seen slanting up to the left through the outside edges of the stripes and two of the spots. The lower left tip of one stripe immediately adjacent to the diagonal line was mistakenly omitted. Two diagonal lines are also visible in the detail on the cover, one in the lower center, the other in the upper left.

Since many of the same physical and structural features were used in weaving Anatolian carpets with little if any variation over

hundreds of years, it is often very difficult to determine their place and date of manufacture. In 1964 it was revealed that a carpet with the same pattern of spots and stripes on an ivory ground acquired by the Victoria and Albert Museum in London in 1933 was a forgery.¹ The story of this and other faked carpets is told by the late German orientalist Kurt Erdmann in a fascinating exposé entitled "A Carpet 'Unmasked'," first published in German in 1964 and again in 1966 as part of a collection of articles. In the English edition, *Seven Hundred Years of Oriental Carpets*, 1970, his widow and editor Hanna Erdmann recorded that yet another carpet with this pattern, acquired by the Islamic Department of the Berlin State Museums in 1959, seemed also to be a forgery,² an allegation which has been confirmed.³

With these disturbing revelations at hand, what evidence exists to confirm that the Bode carpet is a truly classical carpet above suspicion? The answer is not simple. It is the combination of many factors, scientific evidence and visual interpretations of the Bode carpet as well as comparisons with classical Anatolian carpets and other forgeries.

The Bode carpet was first published in 1901 in the first edition of Wilhelm Bode's important book, *Vorderasiatische Knüppteppiche aus älterer Zeit*.⁴ The history of the carpet before that date remains unknown.⁵ In the illustration in 1901, the condition of the carpet appears very similar to its present condition. That illustration and those in subsequent editions show only three-quarters of the carpet, probably because the upper border was already missing. The illustration shows that the outer guard stripe across the bottom of the carpet was lacking as well as half the outer guards along both sides. In addition, there are small areas of reknitting throughout the carpet, visible in the 1901 reproduction as darker rectangles. The discoloration of the repairs suggests that they may have been made considerably earlier than 1901.⁶ Although forgers can make incomplete carpets

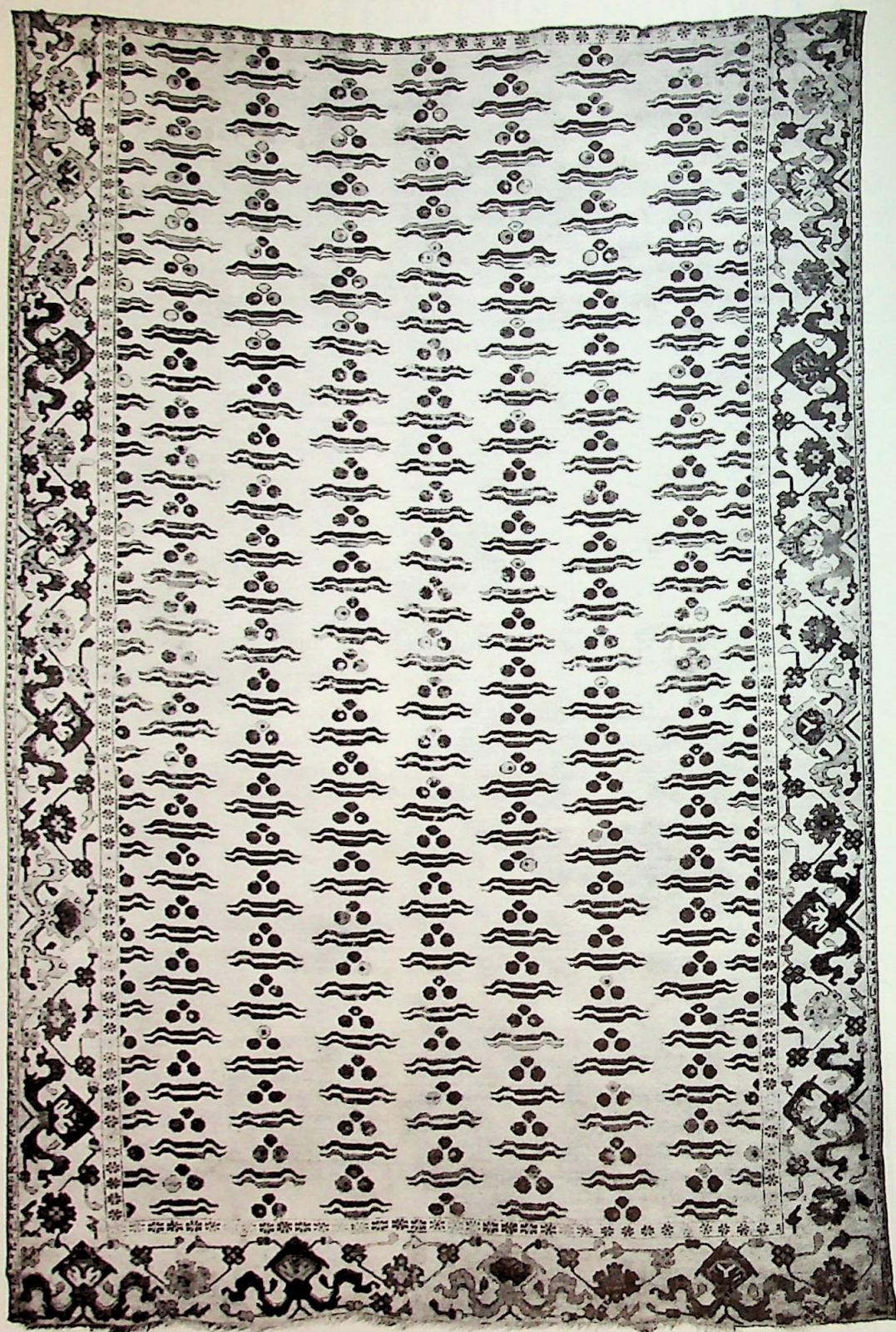


Fig. 1. Carpet from northwest Anatolia, late 16th or early 17th century, ex-collection Wilhelm Bode. Textile Museum 1976.10.1, Purchase, Arthur D. Jenkins Gift Fund and Proceeds from the Sale of Art.

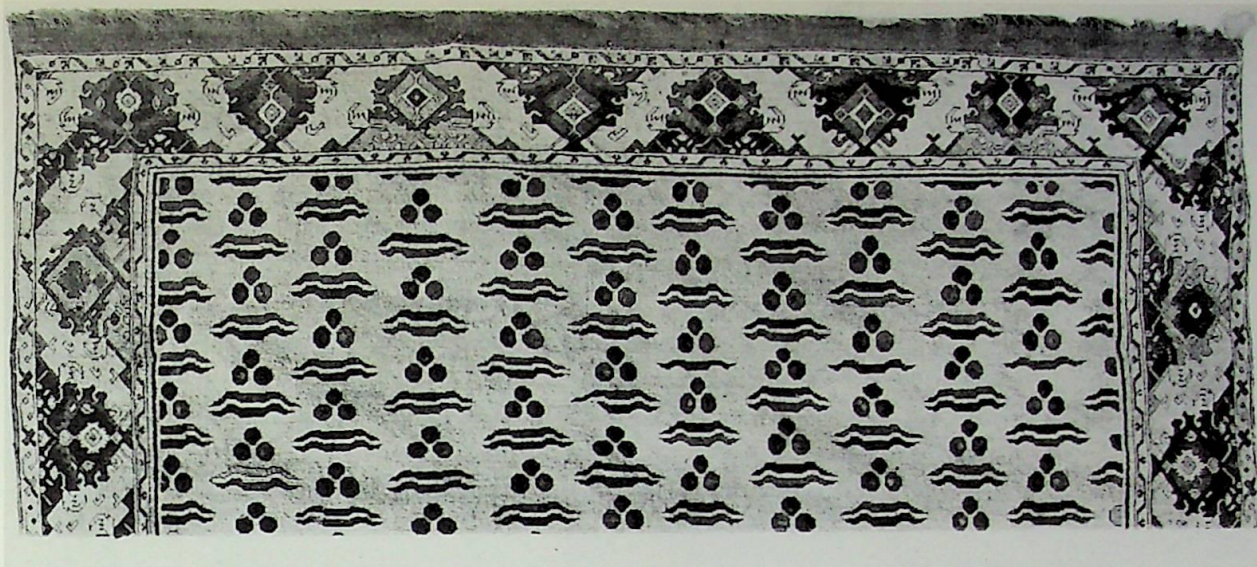


Fig. 2 Carpet from northwest Anatolia, late 16th or 17th century. Collection of Prince Von Schwarzenberg. After plate VI in *Oriental Carpets* (Vienna 1892).

and can “age” carpets, the kind of incompleteness and the small scattered repairs in the Bode carpet tend to indicate natural wear over many years. The two faked carpets mentioned above are both complete and appear to be in very good condition.

The second piece of evidence comes from the only scientific testing presently available for carpets.⁷ Samples of each of the colors in the carpet were recently submitted for chemical analysis and the dyes were identified and reported to be consistent with those found in classical Turkish carpets, as Professor Whiting states in Appendix C to this article. The color changes in the blue-green, achieved by a double dye process, are found in a number of classical carpets. The absence of aniline dyes does not, of course, in itself confirm that the carpet could not have been woven after their invention in 1856. Aniline dyes were, however, found in both of the faked carpets and provided the indisputable evidence of their modern origin.³

In addition to the color tones, the placement of the colors is also significant. All aspects of the patterns have considerable color variations, seemingly at random. No one motif remains the same color throughout. Even the interior “eyes” in the balls vary. Frequent color changes occur in some 16th century carpets woven in Ushak in northwest Anatolia.

The three balls in the faked carpets are all dark; one has all brown-black balls.

A fourth consideration is the drawing of the patterns. The motif of three balls and paired-wavy lines and the pattern of the cloud-band border are rendered with a convincing degree of regularity, but they do not look mechanical. Slight variations of the contours are to be expected, yet they do not cause a sloppy appearance. The beginning of the field pattern at the bottom of the carpet and its completion at the top are logical and convincing within the context of Islamic patterning, as is the use of the motif along the two sides so that almost half of the pattern shows before being interrupted by the border. This was done by restricting the space between the motifs at the two sides. It suggests that perhaps a carpet of exactly this width was requested. Should this have been the case then, instead of altering the weavers’ traditional spacing of the pattern throughout the field, it was minimized only at the two sides in order to achieve the appearance of infinite patterning, a concept frequently visible in Islamic art.

Another carpet with the same field pattern, but with a different border pattern (Fig. 2), is named after the Von Schwarzenberg family in Austria. The carpet is reported to have first been listed in the inventory of the

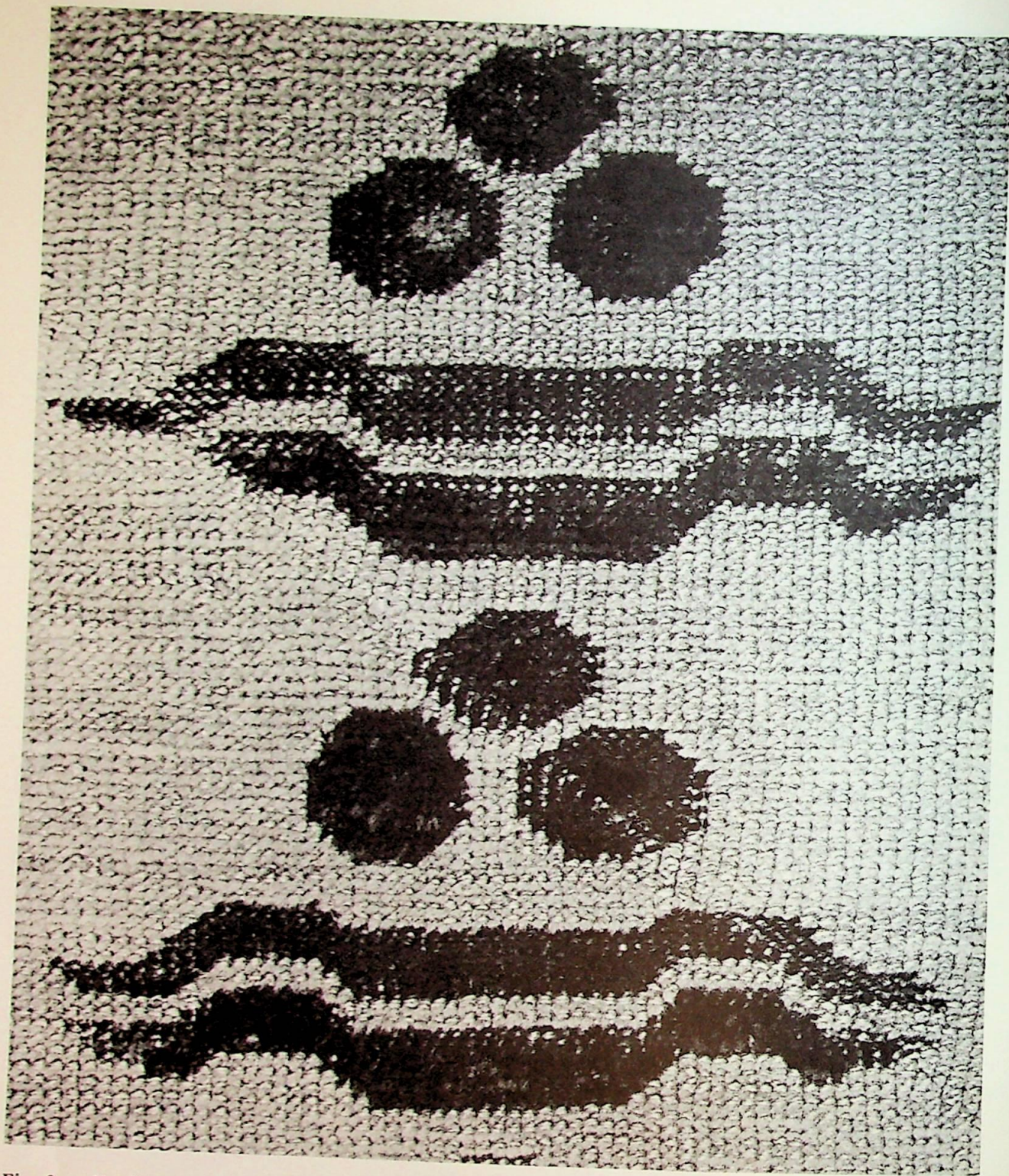


Fig. 3 Detail of the carpet illustrated in Figure 1, showing a "lazy line."

Von Schwarzenberg collection in 1724. A "lazy line" occurs in the center of the illustrated area of the carpet where the tip of one of a pair of wavy lines is omitted, even more noticeably than in the Bode carpet (Fig. 3). Other aspects of the field pattern of the Von Schwarzenberg carpet are readily comparable with those discussed in the Bode carpet.

Although carpet weaving techniques can be copied, the specific feel and pliability of a classical carpet cannot be easily imitated. The Bode carpet has the physical characteristics of a classical Anatolian carpet.

An important final consideration is the opinion of Charles Grant Ellis, a scholar who has studied and handled hundreds of 16th and 17th century Turkish carpets as well as those woven more recently. He has always had confidence in the age of the Bode carpet, but recently, at the request of the Director, he carefully reexamined it. Nothing altered his opinion that it is indeed a classical Anatolian carpet.

None of these considerations taken alone can confirm the age of the Bode carpet, but when they are added together and no questionable points arise, the carpet can truly be called a classical Turkish carpet. Let us now consider the Bode carpet in the context of the period when it was woven.

Of all the patterns in Anatolian carpets, none appears more frequently in Ottoman court art—which reached its artistic height in Istanbul during the reign of Suleyman the Magnificent in the mid-16th century—than this one with paired-wavy lines and three balls. The true significance and source of this ancient pattern still await satisfactory explanations. The combination of motifs may have evolved from animal skins—tiger stripes and leopard spots—worn by rulers possibly to suggest their worldly strength and power. This pattern appears in considerably earlier Central Asian painting and, during the 14th century, the three balls were associated with the badge of Timur, or Tamerlane, the Mongol conqueror of Persia. In carpet literature, the pattern has often been called "Chintamani" based on an erroneous association with a Buddhist emblem.⁸

It is highly probable that the use of this pattern in Anatolian carpets was inspired by and derived from its popularity in the art of the Ottoman court in Istanbul. This pattern

and its several variations occur in many of the Ottoman decorative arts made either in the court ateliers in Istanbul or acquired for use by the court, particularly during the 16th and 17th centuries. It appears especially in silks (Figs. 4 and 5), ceramic plates and tile revetments (Fig. 6), bookbindings and embroideries (Fig. 7). Several kaftans with this exact pattern were worn by sultans during the 16th century and have been preserved in the Topkapi Palace of the Ottoman sultans in Istanbul. One velvet kaftan has an ivory ground with crimson "spots and stripes" (Fig. 5) while another has gilt-metallic threads forming the pattern on a crimson-ground kaftan.⁹ Unfortunately, none of the kaftans can be securely dated because of the inadvertant re-use of labels and wrappings over the centuries. Possibly one of the earliest references in Turkey to the leopard spots of this pattern is recorded in a 1483 list from the silk weaving center of the country, Bursa: "Dotted velvet wrought with golden thread."¹⁰ The only dotted silks known have dots in this triangular arrangement.

Since this pattern was so popular in the Ottoman court, it is possible that this exact layout was also woven as an Ottoman carpet, although no examples are known. Variations of the pattern, however, have survived in two different qualities of Ottoman carpets woven in widely separate areas.

The patterns of the Ottoman carpets are composed of highly sophisticated foliate and floral designs closely reflecting the Ottoman court style. The patterns indicate that they were woven any time after about 1550. Stylistic and technical features (i.e. S-spun wool, asymmetrical knot called Persian or Senneh) confirm that some were woven in Cairo, already a carpet-weaving city when conquered by the Ottomans in 1517, and others were woven in the Istanbul area or possibly in nearby Bursa (Fig. 10). There are at least two distinct qualities of Ottoman carpets, the all-wool quality woven in Cairo and the finer quality with silk wraps and wefts woven in the Istanbul area. Although the latter have patterns which could have been woven any time after about 1550, they have several technical features which indicate that they were probably woven by carpet weavers from Cairo, possibly the weavers ordered by name from Cairo to Istanbul by

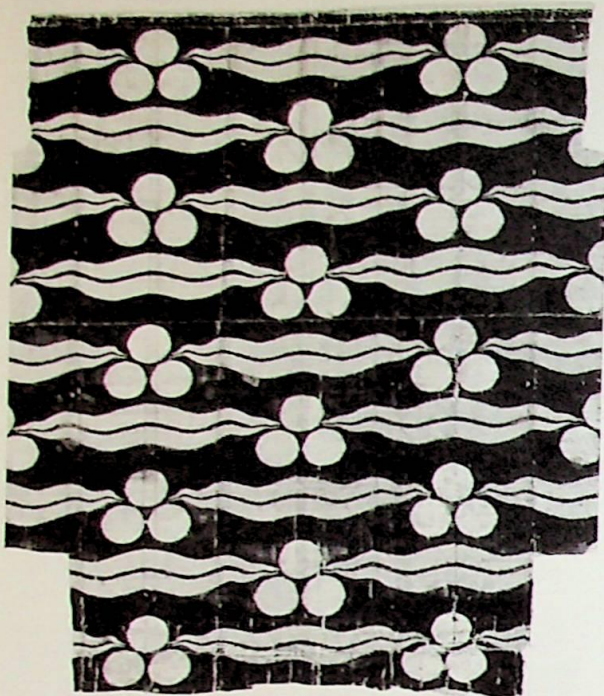


Fig. 4 Ottoman velvet, Bursa, early 16th century. Textile Museum 1.77.



Fig 5 Ottoman velvet kaftan with crimson pattern on ivory ground, late 15th or early 16th century. Topkapi Palace Museum, No. 2/3228.

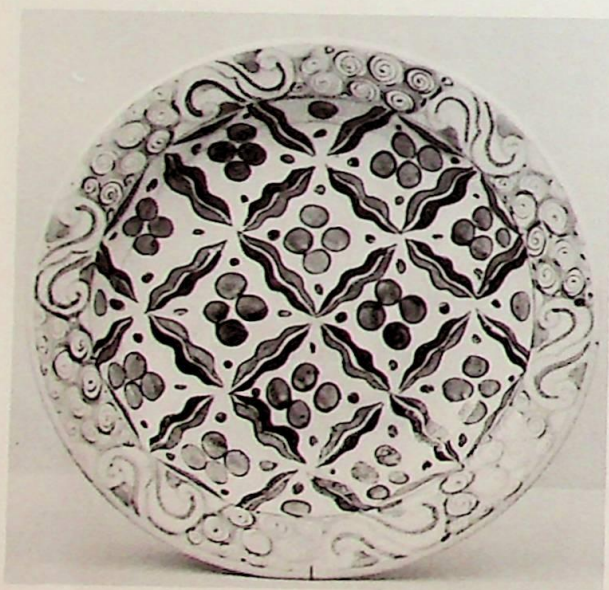


Fig. 6 Ceramic plate, Iznik, Turkey, late 16th or early 17th century. The Metropolitan Museum of Art, Gift of W. B. Osgood Field, 02.5.55.

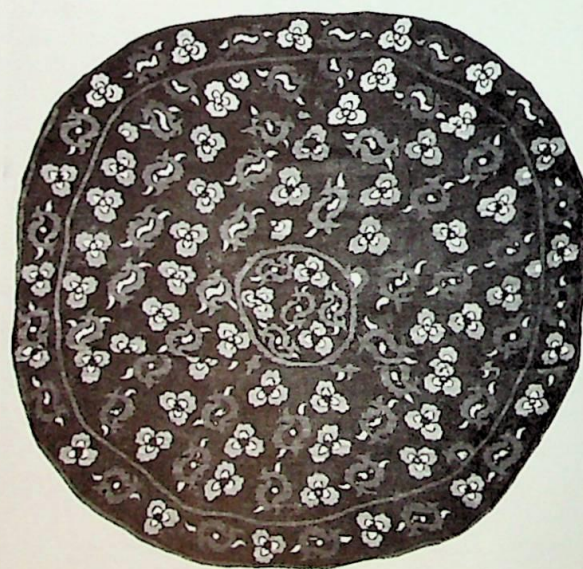


Fig. 7 Silk embroidery with variant spot and stripe pattern, Turkey, 17th-18th century. Textile Museum 1.4.

Sultan Selim III in 1585 along with nearly 4000 pounds of their wool.¹¹ This evidence suggests that 1585 may have been the begin-

ning of the manufacture of Ottoman carpets in the Istanbul area. The year 1585 is a surprisingly late but not implausible date.

In the seven hundred year history of Turkish carpets, there was only this one short period during the second half of the 16th and early 17th centuries when Ottoman carpets were woven with their specific technical features and the curvilinear patterns of the Ottoman court art. Only these are Ottoman carpets; all others, probably ninety-nine percent, are Anatolian or Turkish.

The variations of the pattern known in the rare first-quality Ottoman carpets woven in the Istanbul area use the paired wavy lines, usually with jagged edges, placed diagonally. The finest, a gift from Wilhelm Bode to the Berlin Museums in 1905, was one of the bitter losses in Berlin during World War II.¹²

A small Ottoman fragment in the all-wool quality from Cairo with a variant rendi-

tion of the spot and stripe pattern (Fig. 8) was very kindly brought to the attention of the author by Charles Grant Ellis. The layout of the yellow stripes and ivory spots with green "eyes" on the crimson ground is most readily comparable with an earlier 15th century Ottoman velvet of exceptionally fine quality (Fig. 9). Besides the jagged edges of the stripes in the carpet, the only significant difference is the use of a single spot instead of three spots above the raised center of the stripe. This seemingly insignificant fragment is the only Ottoman example known with a layout of the pattern so closely-related to that in the field of the Bode carpet.

A more simplified version of the pattern survives in several other all-wool Ottoman Cairenes. Single spots above and below single

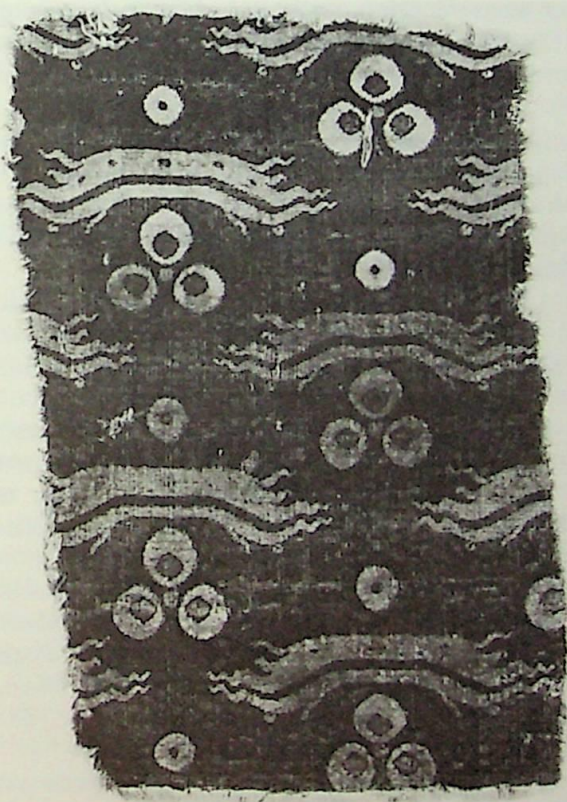


Fig. 8 Ottoman carpet fragment with variant spot and stripe pattern, Cairo, mid-16th century. Staatliche Museum für Völkerkunde, Munich, No. 32-50-19.

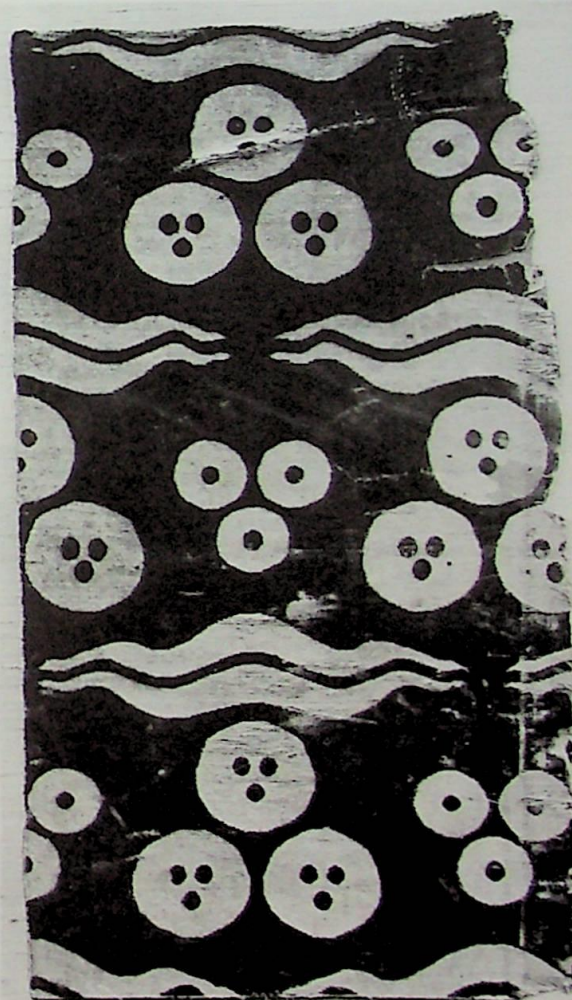


Fig. 9 Ottoman velvet with variant spot and stripe pattern, Bursa, late 15th century. Textile Museum 1.44.



Fig. 10 Detail of Ottoman runner with spot and stripe pattern in guard stripes, Istanbul area or Bursa, late 16th century. Textile Museum R34 33.1.

stripes were woven in staggered rows on a crimson ground surrounded by a typical Ottoman foliate border. These small carpets appear to have been produced in quantity; seven are known today plus one fragmentary prayer carpet with columns.¹³

Even before the Ottomans conquered Cairo in 1517, a variation of the pattern appeared in an eight-color Mamluk carpet woven in that city around 1500, a surprisingly early date.¹⁴ Although the layout is compressed and tilted, it is unlikely that it is not associated with the spot and stripe pattern. Did an Ottoman export item provide the model?

Another contemporary Mamluk carpet from Cairo displays a spot and stripe variation with three balls alternating with a wavy line within the narrow dimensions of the guard stripes in the border.¹⁵ The same drawing also appears in the guards of the later first-quality Ottoman carpets (Fig. 10), as well as related renditions in ceramic tile revetments in Istanbul. Whether this logical layout was influenced by earlier Coptic Egyp-

tian textiles with a simpler version in a guard stripe—an alternating single ball and line—is unknown.¹⁶ Mamluk carpets do, however, display a number of specific stylistic features from Coptic textiles.¹⁷

Despite the existence of only a few Ottoman carpets with spot and stripe patterns, the popularity of the pattern suggests that more may originally have been woven which could have served as models for the Anatolian weavers. In addition to the ivory-ground carpets, this pattern was also woven in Anatolia on colored grounds, such as the huge red-ground carpet, probably made in Ushak, which is housed with the greatest collection of Turkish carpets in the Turkish and Islamic Arts Museum in Istanbul.¹⁸ A few variations of the pattern appear on dark grounds.¹⁹ Some even use only the three spots.²⁰ These date from the 17th century on.

A comparison of the drawing of this pattern in silks or ceramics (Figs. 4, 5 and 6) and in the Bode carpet (Figs. 1 and 3) emphasizes not only the varying predilections of the different groups of artisans—one with court associ-

ations, the other provincial—but also the intrinsic characteristics of each medium. The renderings in silks and ceramics flow with a graceful rhythm reflecting the materials and the taste of the Ottoman court. In contrast, the drawing in the carpet is more angular, a feature characteristic of almost all carpets woven in Anatolia. One specific difference in the drawing of the pattern occurs in the relationship between the spots and stripes. In the Ottoman examples, the spots are placed above the *raised* center of the stripes (Figs. 4, 5, 8 and 9) whereas in the Anatolian carpets, the spots are above the *lowered* center of the stripes (Figs. 2 and 3).

Anatolian carpet patterns typically have bold, angular drawing enlivened with bright colors. The angular drawing of the pattern displays an inherent honesty to the carpet structure which is, after all, composed of vertical and horizontal elements. Anatolian carpets are well woven but typically have only fifty to ninety symmetrical knots per square inch. The Bode carpet has sixty. The Anatolian carpet weavers used the knot count appropriate for achieving their desired visual effect. Had they wished to produce carpets with delicate patterns, which require at least twice as many knots per square inch, they could most likely have done so. For example, some carpets with over 200 knots per square inch forming very detailed patterns were woven in Gördes in northwest Anatolia.

In addition to the predominance of red- and blue-ground Islamic carpets, there appears to have been a tradition in Anatolia of carpets with ivory grounds. One is included among the earliest surviving Islamic carpets, discovered in a mosque in Konya in central Anatolia and attributed to about 1300.²¹ A rare early 15th century carpet found in a church in Marby, Sweden, has a pattern of confronted birds on an ivory ground²² while another ivory-ground carpet with rows of birds was documented by the 15th century Spanish painter, Jaume Huguet (died 1437/8).²³ Several 16th century European inventories list ivory carpets from Turkey without any indication of their patterns. The phrase “*weisse türkische Teppiche*” appears as early as 1503 in an account in Kronstadt, Transylvania (today Brasov, Romania).²⁴

In Turkey, two patterns in particular are associated with ivory grounds, both originat-

ing during the 16th century, probably in northwest Anatolia, in or near Ushak. Both employ a similar color range and share specific border patterns. One is the spot and stripe pattern that occurs in the Bode carpet; the other is the so-called “bird” pattern, a misnomer which continues to be associated with an inanimate pattern whose foliate nature has long been identified (Fig. 11). A grid layout is formed by angular, paired leaves that are attached to rosettes. Because the area between the paired leaves has a colored instead of an ivory ground, thereby suggesting a “bird” with two heads, the misnomer has been applied.

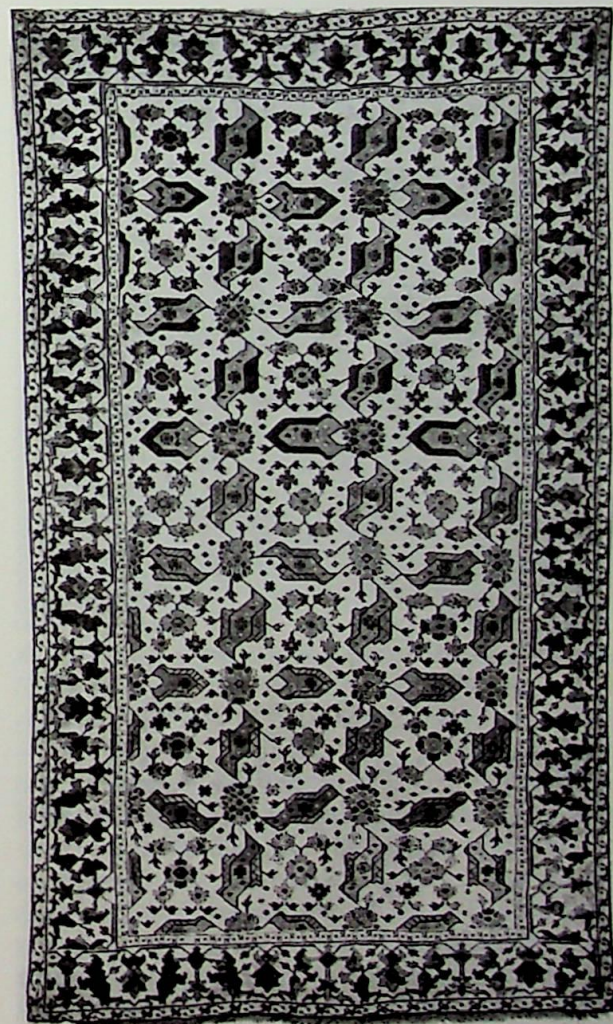


Fig. 11 “Bird” carpet from northwest Anatolia, Ushak (?), 17th century. Textile Museum R34.20.1.

Several variations occur in the Textile Museum's "bird" carpet (Fig. 11): the drawing of the rhomboid leaves ("birds") varies in alternate rows, and the leaves face in various directions. Each row of flora also faces an opposite direction, thereby denying the pattern its usual bottom and top. These design factors, in addition to the color changes, prompted a recent testing of all eight colors. Fortunately, no aniline dyes, which would indicate a post 1856 date, were found and the dyes used were reported to be consistent with those in classical Turkish carpets.²⁵

Since Islamic carpets rarely have inwoven dates, their dating depends on other criteria. When the patterns reflect the style of the court, they can be assigned tentative dates on stylistic grounds, but this is hardly ever possible with Turkish carpets. As previously mentioned, only one such period of production in Turkey is known, the Ottoman carpets of the second half of the 16th and early 17th centuries.

The most valuable documents available for dating Turkish carpets are European paintings. The representation of a Turkish carpet in a dated painting confirms that the pattern shown was being woven as early as that date (Fig. 12). By the 14th century, quantities of "Turkey Carpets" were held in such high regard that they were frequently depicted under the throne in paintings of the Madonna and Child. But relatively few carpet patterns were actually recorded in European paintings in comparison with the many patterns woven in Anatolia. Unfortunately, the spot and stripe pattern of the field of the Bode carpet is not known to have been one of them.

It is especially regrettable that Turkish sources currently contribute little information to the study of classical Turkish carpets. Even the carpets portrayed in the Turkish miniatures painted in the Ottoman court atelier—which often record identifiable scenes and specific events—are mostly cursory sketches of medallion patterns.

No documents, therefore, have come to light to inform us how early or how long this spot and stripe pattern was woven as a carpet in Anatolia. Its popularity in Ottoman court art during the 16th and 17th centuries can only provide a rough guide. An examination of the border patterns, their origins and associated dates, however, will shed additional



Fig. 12 Hans Mielich, *Portrait of Count Ladislaus von Hag* with "bird" carpet, about 1557. Collection of Mrs. Rush H. Kress, New York.

light on the problem of determining the possible age of the Bode carpet.

The main border of the Bode carpet displays the cloud-band pattern which is composed of symmetrical cloud bands on a vine with large rosettes and small blossoms. This same pattern was also used as the border for about half a dozen field patterns, several of which are attributed to Ushak during the late 16th and 17th centuries.²⁶ A number of these carpets with cloud-band borders were portrayed by European painters. The earliest known representation appears in the *Annunciation* by Jacob Claesz van Utrecht, attributed to 1532 (Fig. 13).²⁷

The appearance of the cloud-band pattern in Anatolian carpets as early as 1532 is both noteworthy and surprising. Its curvilinear drawing is in marked contrast to most 15th and early 16th century Anatolian carpet patterns which are characterized by angular and geometric motifs. The drawing suggests that it was adapted from a more sophisticated, curvilinear rendition, probably from the court

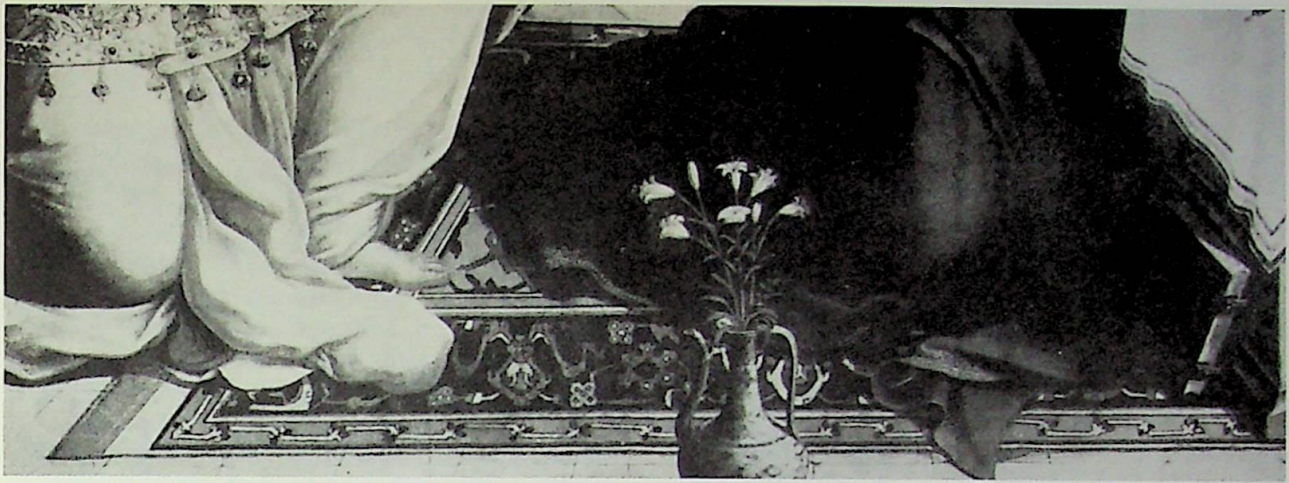


Fig. 13 Jacob Claesz van Utrecht, detail, *Annunciation* showing Anatolian carpet with cloud-band border, attributed to 1532. Leipzig, Museum der Bildenden K nst. After Enderlein, see Note 13.

atelier in Istanbul. Comparatively little Ottoman art survives, however, in which to find a prototype before the year 1532, a date which is about twenty years before the blossoming of Ottoman art in Istanbul.

Cloud bands were fashionable in the court art of the Islamic countries in the Near East during the 15th and 16th centuries, having been adopted from Chinese art and altered into a variety of Islamic versions. The early representations of cloud bands in Turkey show them in isolation or in groups, rather than as continuous border patterns. Perhaps the earliest example in Istanbul is on a gilded tile in the Q nili Kiosk (Tiled Pavilion) built by Sultan Mehmed II (the Conqueror) on the Topkapi Palace grounds in 1472.²⁸ Beautifully drawn cloud bands also occur on early 16th century blue and white ceramic plates made in the nearby town of Iznik.²⁹

Another motif forming this main border pattern is the rosette which appears on a vine between the cloud bands. Often referred to as a cogwheel rosette, it has six, or sometimes eight, trilobed petals (Fig. 14). Comparative rosettes are known, but only on later Iznik plates made after 1550 (Fig. 15). They may represent a bird's-eye view of a lotus blossom derived from similar renditions on 14th century Chinese blue and white porcelain plates that were plentiful in the kitchens of the Topkapi Palace.³⁰ These same cogwheel rosettes also occur in the field patterns of several carpets attributed to 17th century Anatolia.³¹

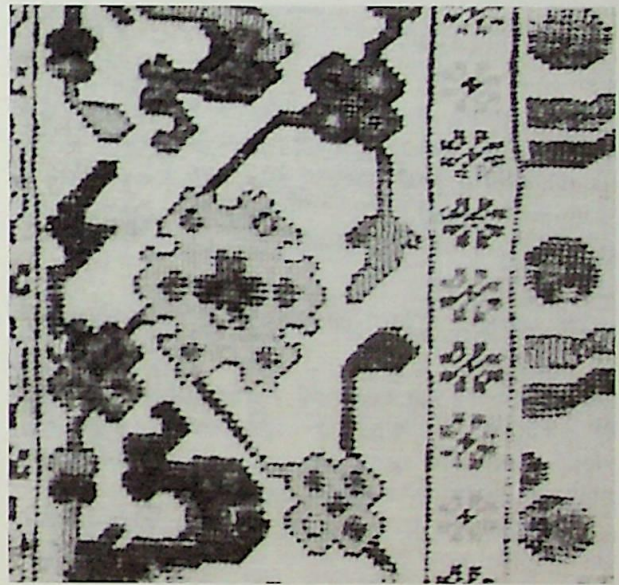


Fig. 14 Rosette from cloud-band border of the carpet illustrated in Figure 1.

One seemingly inconsequential motif in the border pattern is the pair of small rectangles on the vine flanking the cloud bands (see cover). Rectangles are not normally associated with vines; nevertheless, the same unusual motif occurs as a single rectangle on a delicate vine on a tile panel also in the Q nili Kiosk built in 1472.³²

The designs for the tiles of the imperial Q nili Kiosk, and also for some of the Iznik



Fig. 15 Ceramic plate with central rosette, Iznik, Turkey, 1550-1575. The Museum of Fine Arts, Boston, 19.1199. Photograph by Walter B. Denny.

plates, were probably drawn by the artists working in the Ottoman court painting atelier in Istanbul. In addition to Turkish artists in the atelier, archival documents record the presence of Persian painters and occasional European painters.

As previously mentioned, cloud bands were an international fashion in the court art in the Near East and they were especially popular in 15th century Persia. The seemingly insignificant small rectangles on a delicate vine were also used abroad and can be found in contemporary Persian decoration.

Although it remains highly probable that the cloud-band pattern which appears in Anatolian carpets by 1532 was designed in the Ottoman court painting atelier in Istanbul, the nationality of the artist cannot be established. That he was probably an illuminator is suggested by the continuous nature of the border pattern in the carpet. Indeed, the missing model for this cloud-band pattern may be found someday among the illuminations in early Ottoman manuscripts.

With specific reference to carpets, it is noteworthy that none of the few Persian carpets attributable to the early 16th century—before the representation of the cloud-band border in the painting of 1532—has a relevant pattern. Actually, only one carpet survives with an earlier cloud-band border. It is a

prayer carpet woven in Mamluk Cairo about 1500. Its cloud bands are, however, treated as isolated motifs facing in alternate directions.³³

The second pattern to be examined is that of the inner guard stripe containing isolated rosettes with eight petals. The earliest known carpets with this guard-stripe pattern appear in the "transitional" carpets woven in Cairo after the Ottoman conquest in 1517 which combine Mamluk and Ottoman drawing.³⁴ They also form the pattern of the guard stripes in the carpets with the refined Ottoman patterns discussed above, both the all-wool quality woven in Cairo and the finer quality with silk warps and wefts woven in the Istanbul area, possibly after 1585.³⁵

The third and final border pattern to be considered is a vine in the outer guard stripe of the Bode carpet which has unfortunately been partially worn away and is therefore difficult to recognize. The same vine is clearly visible in the inner guard of the Textile Museum's "bird" carpet (Fig. 11) and it also appears in one of the earliest representations of "bird" carpets by European painters, *Portrait of Count Ladislaus von Hag* by Hans Mielich, about 1557 (Fig. 12).

Let us now summarize the available information in an attempt to date the Bode carpet. The ivory ground carpets with the spot and stripe pattern have traditionally been associated with the ivory ground "bird" carpets owing to their use of similar colors and some of the same border patterns. Carpets with "bird" patterns were woven at least as early as about 1557 when Mielich painted an example in the portrait (Fig. 12).

What information do the actual motifs in the Bode carpet provide? The spot and stripe pattern was very fashionable in Ottoman court art, appearing in Ottoman velvets in the late 15th century and in all the Ottoman decorative arts by the third quarter of the 16th century. Variations of the pattern survive in Ottoman carpets which suggests that Ottoman carpets with this precise pattern may also have been woven. The cloud-band border appears in a Turkish carpet painted by Claesz van Utrecht in 1532. The vine in the outer guard stripe is visible in the "bird" carpet painted by Mielich in about 1557. The isolated rosettes of the inner guard stripe were used in "transitional" Cairene carpets, woven

probably during the second quarter of the 16th century. These dates confirm that all of the patterns in the Bode carpet were in use by the middle of the 16th century.

This summary indicates that the Bode carpet could have been woven as early as the mid-16th century. However, in an industry which honors the continuity of patterns, the possibility always exists that it could also have

been woven during the ensuing hundred years. As we have seen, the cloud-band pattern was at least one or two generations old by the time the Bode carpet could have been woven. The Bode carpet can therefore only tentatively be ascribed to the late 16th century. It is to the credit of the Anatolian weavers that this carpet has retained its extraordinary visual appeal for so many centuries.

APPENDIX A—TECHNICAL ANALYSIS AND ILLUSTRATED REFERENCES

Acc. No.: 1976.10.1.

Size: length 10 ft. 4 in.; width 6 ft. 7 3/4 in. (3.15 m. x 2.02 m.).

Warp: wool, ivory, 2 Z-yarns S-plied.

Weft: wool, ivory, Z-yarns, 2 shots, diagonal lines.

Pile: wool, 2 Z-yarns (ivory and dark blue), 1 Z-yarn (other colors), Gördes knot, slant to left, 7 horiz. x 8 vert.; 7.5 horiz. x 8 vert.; 7 horiz. x 8.5 vert. (average 60 knots per square inch).

Color: (12) ivory, red (2), light blue, dark blue, blue-green, tan (3), brown (2), dark brown/black.

Condition: missing upper main border and outer guard stripe, and lower outer guard stripe; outer guards on both sides are halved; no original finishes; brown/black mostly disintegrated; scattered areas repaired with reknitting and flat stitches.

Published: Wilhelm Bode, *Vorderasiatische Knüpfteppiche aus älterer Zeit* (Leipzig, 1901), Abb. 64.

F. R. Martin, *A History of Oriental Carpets* (Vienna, 1908), p. 123, Fig. 326 and pp. 130, 132.

Wilhelm Bode, *Antique Rugs from the Near East*, 3rd revised ed. with contributions by Ernst Kühnel, trans. R. M. Riefstahl (New York, 1922), Fig. 79.

Ernst Kühnel, *Orientalische Knüpfteppiche in Nachlass Wilhelm von Bode*, S. 27, Nr. 60 and Taf. XIV (Versteigerungskatalog Cassirer und Helbing, 5 November 1929).

Frank Rutter, "Notes from Abroad," *International Studio* (July, 1930), p. 60, illus.

Kurt Erdmann, "Ein 'entlarvter' Teppich," *Heimtex*, Vol. 16 (Dec. 1964), p. 124, Fig. 3.

Kurt Erdmann, *Siebenhundert Jahre Orientteppich*, ed. Hanna Erdmann (Hertford, Germany, 1966), Abb. 215.

Turkish Rugs, ed. Ralph S. Yohe and H. McCoy Jones (Washington, D.C., 1968), Fig. 8.

Kurt Erdmann, *Seven Hundred Years of Oriental Carpets*, ed. Hanna Erdmann, trans. May H. Beattie and Hildegard Herzog (Berkeley and Los Angeles, 1970), Fig. 94, pp. 225, 156.

Louise W. Mackie, *The Splendor of Turkish Weaving* (Textile Museum, Washington, D. C., 1973), No. 34, illus.

APPENDIX B—"LAZY LINES" DEFINITION AND EXPLANATION

"Lazy lines" are diagonal lines, often several inches in length, formed by the slightly irregular meeting points of successive rows of discontinuous wefts. Rather than inserting continuous wefts across the full width of a carpet, shorter discontinuous wefts are used.

In large carpets woven by several weavers sitting side by side, each weaver works in a specific area; in small carpets, the single weaver may be too lazy to move sideways, hence the name "lazy lines."

After making a row of knots in a given area, the weaver inserts one or more wefts across the warps of that area, over one, under

one, beats them in, and starts another row of knots in the same area, but stops one warp to the right or left of where the previous row ended. This gradually forms a diagonal line which is structurally stronger and less noticeable than a vertical slit. The slight differences in the weaving habits of the adjacent weavers, one beating somewhat harder than the other, may cause the discontinuous wefts to meet on slightly different levels and thus the diagonal lines become more noticeable.

Diagonal lines are clearly visible on the back of a pile carpet, and can be seen on the pile face only when it is sufficiently worn.

APPENDIX C—DYE ANALYSES

Professors M. C. Whiting and A. D. Clemson of the School of Chemistry at the University of Bristol, England, kindly agreed to make dye analyses from individual knots taken from the ivory-ground rug with spots and stripes pattern and the ivory-ground rug with the so-called "bird" pattern, both in the Textile Museum. Knots were taken from all areas that showed appreciably different colors, in order to give a representative sampling. Twelve knots of various colors were taken from the carpet with spots and stripes pattern, eight knots from the so-called "bird" carpet. The following report is derived from two letters and a report sent to the Textile Museum on June 21st and October 28th, 1976.

Dye analysis of the ivory-ground rug with spots and stripes pattern, 1976.10.1 (color cover and Fig. 1.):

Three samples from dark-blue and blue-green areas were found to contain indigo. Two samples from red areas and one sample from a brown area were found to contain madder. A sample from another brown area, however, contained a dye that could not be identified; possibly inorganic, not madder. This unidentifiable dye could be the same dye, likewise unidentifiable, that was found in three samples from areas that ranged from

a light brown to beige. These three samples gave no positive tests for any known dye. Further investigation is needed. A sample from the ivory-ground contained no organic dye. A sample from a dark-brown/black area contained no organic dye. Tests were not made for inorganic dyes. It is supposed by analogy that the color was achieved with iron and tannin, although this is not certain. The knot sample submitted had partially disintegrated which is consistent with samples of black knots known to contain iron from other rugs. No synthetic dyes, no insect-derived dyes, and no yellow dyes were obtained from any samples.

Dye analysis of eight samples from the ivory-ground rug with the "bird" pattern, R34.20.1 (Fig. 11):

Three samples from areas that ranged from red, rose-red, to pink were found to contain madder. Three samples from areas that varied from dark blue, "electric" blue, to blue-green were found to contain indigo. A sample from a black area contained no detectable dye. Though not certain, it is supposed by analogy that the color was achieved with iron and tannin. A sample from a beige area, thought by the Museum to be a faded blue-green, did not contain any detectable indigo but may have had a trace of madder. Further

investigation is needed. No synthetic dyes, no insect-derived dyes and no yellow dyes were obtained from any sample.

The methods used were those of classical dye-analysis, modified by the use of modern instrumentation to allow small-scale work and some increase in precision. Thus, all fibres were heated with methanol containing sulphuric acid (necessary to free mordant dyes from their aluminum or iron lakes); the dyes present were examined spectroscopically, after removing the methanol and adding ether and water. *Indigo* is obtained in the ether, and has

an absorption maximum at 606 nm. *Madder*, also in the ether, consists of several known ingredients, giving a characteristic spectrum having maxima at 446, 480, 520 nm. Kermes would have gone into the ether, where it has a quite different spectrum. Lac and cochineal would have remained (mainly and completely, respectively) in the water layer, and so would typical synthetic dyes. None of these were found. Yellow dyes are not easy to identify in this way. They were sought for in examination by thin layer chromatography, but none were found.

NOTES

¹Kurt Erdmann, *Seven Hundred Years of Oriental Carpets*, ed. Hanna Erdmann, trans. May H. Beattie and Hildegard Herzog (Berkeley and Los Angeles, 1970), p. 81 and Fig. 92.

²Erdmann, *Seven Hundred Years*, pp. 81-85 and p. 224, No. 92 with reference to Pl. XII.

³Friedrich Spuhler, "Review of Kurt Erdmann, *Siebenhundert Jahre Orientteppich*," *Kunst des Orients*, Vol. VIII (1974), pp. 136-137.

⁴Wilhelm Bode, *Vorderasiatische Knüpsteppiche aus älterer Zeit* (Leipzig, 1901), Abb. 64.

⁵In an article published in 1891 showing many of his carpets, Bode did not illustrate the Museum's carpet but another with the same field pattern (the Von Schwarzenberg carpet, Fig. 2 of this article). We may assume, therefore, that he acquired his carpet after 1891. Wilhelm Bode, "Ein altpersischer Teppich im Besitz der Königlichen Museen zu Berlin," *Jahrbuch der Königlich Preussischen Kunstsammlungen*, Vol. 13 (Jan. 1892), p. 119, Fig. 18.

⁶Erdmann, *Seven Hundred Years*, Fig. 94 illustrates the complete carpet as it exists today. Repairs show clearly. The photograph could not have been taken after 1929 when the carpet was sold at auction because Erdmann did not know of its location thereafter. Repairs are less apparent in the photograph taken recently for Fig. 1 of this article.

⁷Dating woven fabrics by means of Carbon 14 requires sacrificing a sizeable area of the fabric, although improvements of this technique will require far smaller samples in the future.

⁸In Buddhist art, *cintamani* is the magic jewel, the precious pearl, the philosopher's stone. As the attribute of specific gods, it may be a single jewel or multiple jewels and is often represented with a flaming halo. The paired-wavy lines of the Turkish pattern are not present. General discussion: Wilhelm von Bode and Ernst Kühnel, *Antique Rugs from the Near East*, 4th ed., trans. Charles Grant Ellis (Braunschweig, 1958), pp. 52, 53, 173.

⁹Richard Ettinghausen, *Treasures of Turkey: The Islamic Period* (Geneva, 1966), p. 206, color.

¹⁰Tahsin Öz, *Turkish Textiles and Velvets* (Ankara, 1950), p. 26.

¹¹Ernst Kühnel and Louisa Bellinger, *Cairene Rugs and Others Technically Related, 15th-17th Century*, The Textile Museum (Washington, D.C., 1957), p. 57.

¹²Erdmann, *Seven Hundred Years*, Fig. 166, and p. 125.

¹³Volkmar Enderlein, "Zwei ägyptische Gebets-teppiche im Islamischen Museum," *Staatliche Museen zu Berlin Forschungen und Berichte*, Band 13 (1971), pp. 14, 15, Pl. 2:2 and Fig. 2; Joseph V. McMullan, *Islamic Carpets* (New York, 1965), Pl. 6.

¹⁴M.S. Dimand and Jean Mailey, *Oriental Rugs in The Metropolitan Museum of Art* (New York, 1973), Fig. 182.

¹⁵Erdmann, *Seven Hundred Years*, Fig. 179.

¹⁶Deborah Thompson, *Coptic Textiles in The Brooklyn Museum* (Brooklyn, 1971), Frontispiece, No. 22, early 7th century.

¹⁷Kurt Erdmann, "Kairener Teppiche," *Ars Islamica*, Vol. VII (1940), S. 56 ff.; Manuel D. Keene, Research Associate in the Islamic Department, Metropolitan Museum of Art, has assembled convincing comparisons which he has kindly discussed with the author.

¹⁸Şerare Yetkin, *Türk Hali Sanati* ("The Art of Turkish Rugs") (Istanbul, 1974), Pl. 65, color detail.

¹⁹Erdmann, *Seven Hundred Years*, Fig. 119; Yetkin, *Türk Hali Sanati*, Pl. 68 (red pattern on dark blue).

²⁰Erdmann, *Seven Hundred Years*, Fig. 128; Yetkin, *Türk Hali Sanati*, Pl. 67.

²¹Erdmann, *Seven Hundred Years*, Fig. 23.

²²Erdmann, *Seven Hundred Years*, Fig. 4.

²³Richard Ettinghausen, "New Light on Early Animal Carpets," *Aus der Welt der islamischen Kunst*, Festschrift für Ernst Kühnel, ed. Richard Ettinghausen (Berlin, 1959), pp. 108-114, Figs. 12-14; also illus. Erdmann, *Seven Hundred Years*, Fig. 39.

²⁴May H. Beattie, "Antique Rugs at Hardwick Hall," *Oriental Art*, Vol. V, No. 2 (Summer, 1959), p. 53.

²⁵See Appendix C—Dye Analyses.

²⁶Star Ushak—Wilhelm Bode, *Antique Rugs from the Near East*, 3rd revised ed. with contributions by Ernst Kühnel (New York, 1922), Fig. 68; Variant Star Ushak—Erdmann, *Seven Hundred Years*, Fig. 167; Ushak prayer rugs—McMullan, *Islamic Carpets*, Pl. 83, Bode and Kühnel, *Antique Rugs from the Near East*, 4th ed., Fig. 27; "Lotto"—Charles Grant Ellis, "The 'Lotto' Pattern as a Fashion in Carpets," *Festschrift für Peter Wilhelm Meister*, ed. A. Ohm and H. Reber (Hamburg, 1975), Fig. 3, Anatolian style, p. 24 ascribes tentatively to Ushak; isolated example—Erdmann, *Seven Hundred Years*, Fig. 125.

²⁷Enderlein, *loc. cit.* above Note 13, p. 11 and Pl. 2:1.

²⁸Tahsin Öz, *Turkish Ceramics* (Ankara, 1957), Pl. XXV:46.

²⁹Arthur Lane, *Later Islamic Pottery* (London, 1957), Pl. 28a.

³⁰John A. Pope, "Chinese Influences on Iznik Pottery: A Re-examination of an Old Problem," *Islamic Art in the Metropolitan Museum of Art*, ed. Richard Ettinghausen (New York, 1972), p. 136 and Figs. 25 and 7.

³¹Erdmann, *Seven Hundred Years*, Figs. 125 and 167; Yetkin, *Türk Hali Sanati*, Pl. 57; The Arts Council of Great Britain, *The Arts of Islam*, Hayward Gallery (London, 1976), Fig. 49.

³²Öz, *Turkish Ceramics*, Pl. XXVI:48.

³³Enderlein, *loc. cit.* above Note 13, Pl. 1; also illus. R. Ettinghausen, M. S. Dimand, L. W. Mackie and C. G. Ellis, *Prayer Rugs*, Textile Museum (Washington, D. C., 1974), p. 130, Fig. 19.

³⁴Kühnel and Bellinger, *Cairene Rugs*, Pl. XXII.

³⁵Charles Grant Ellis, "The Ottoman Prayer Rugs," *Textile Museum Journal*, Vol. II, No. 4 (Dec. 1969), Figs. 14-16 and slightly fancier versions Figs. 1-4.

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